A.D. 1866, 19th DECEMBER. N° 3338.

SPECIFICATION

OF

MICHAEL HODGE SIMPSON.

APPARATUS FOR PREVENTING SEA SICKNESS.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:
PUBLISHED AT THE GREAT SEAL PATENT OFFICE,
25, SOUTHAMPTON BUILDINGS, HOLBORN.
1867.

A.D. 1866, 19th *December*. N° 3338.

Apparatus for Preventing Sea Sickness.

LETTERS PATENT to Michael Hodge Simpson, residing at No. 127, Milk Street, Boston, U.S. of America, for the Invention of "IMPROVEMENTS IN APPARATUS FOR THE PREVENTION OF SEA SICKNESS."

Sealed the 19th March 1867, and dated the 19th December 1866.

PROVISIONAL SPECIFICATION left by the said Michael Hodge Simpson at the Office of the Commissioners of Patents, with his Petition, on the 19th December 1866.

I, MICHAEL HODGE SIMPSON, residing at No. 127, Milk Street, Boston, U.S. of America, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN APPARATUS FOR THE PREVENTION OF SEA SICKNESS," to be as follows :—

Experience acquired during many sea voyages has convinced me that sea sickness is produced from the motion of the vessel, causing the stomach to rub against the diaphragm and inferior organs.

The object of this Invention is to provide apparatus by means of which a traveller may prevent this rubbing action, and to effect this I employ apparatus so constructed that the traveller may connect his body as rigidly as possible with the ship.

For this purpose I construct a chair in the manner represented in the perspective view, Figure 1 of the Drawings annexed. This chair is securely fixed to any part of the ship; it has two arms A, B, one of which, A, may be fixed, whilst the other, B, is capable of moving to and from the arm A; to allow of this the ends of the arm B are connected to slides sliding in grooves

or guides formed from end to end of two wooden rails forming part of the chair, and to which the slides may be fixed by binding screws, as shewn, or by other means. At the top of the back of the chair there is a rest C for the head, placed as represented in the Drawing, so as to support the head in a natural and easy manner. The traveller should sit down before the boat starts, and after having settled himself as comfortably as possible by placing the cushions so that the arms of the chair support him by the arm pits without hurting his shoulders or impeding his breathing, he should advance the moveable arm B towards the arm A, so that both arms shall press against his body and hold his body as rigidly as possible; the set screws are then turned so as to fix the arms A and B. In this position the traveller can support his head against the piece C, or lower it against his chest, his hands and feet being left free.

Figures 2 and 3 represent two back views of the seat or chair; in these views the chair is resting on the front legs and on the ends of the two arms A and B. In this manner the traveller can vary his position when he is sufficiently accustomed to the motion of the ship to be able to change his position from that represented in Figure 1. In Figure 2 the traveller is shewn to be lying on his stomach and chest, and to be fastened to the back of the chair with his feet resting flat on the ground, and since the chair is rigidly fixed the traveller is held as firmly as before.

In Figure 3 the traveller is shown to be seated on a board D (previously fastened to the bottom of the back of the chair) with his back against the back of the chair.

To enable the traveller to resist with more certainty the effect of large waves the arms A, B, are furnished with fixed handles for the traveller to hold when in the position shown in Figure 1, and other handles are attached to the back legs or other part of the seat for the traveller to hold when in the attitude represented in Figure 3. The traveller by holding these handles may retain himself in a rigid position during the passage of the wave.

I do not intend to limit myself to the forms of seat shewn, as they are only given as examples. Thus the arms A and B in place of being straight may be curved to follow the shape of the body, or nearly so, the pressure against the body will then be more even; both arms may also be made moveable, and so arranged that the height of the upper ends of the rods may be adapted to the height of the traveller. The head rest may also independently of its vertical adjustment run along a groove formed in the top rail of the back of the chair, in order the better to adapt it to the position of the traveller.

In Figure 4 is represented a sofa combining several seats constructed

according to my system. The space between the moveable arm of one seat and the fixed arm of the next is sufficient for the slides and set screws. The seats may be of varied sizes to suit different persons.

The principle which governs the construction of these seats may, as shewn at Figure 5, be applied with some modifications to sofas or beds. With sofas or beds as now constructed not only is it impossible for a traveller to hold himself rigid, but he is sometimes actually thrown out on to the floor of the cabin. The side boards A and B in Figure 5 are to insure the immobility of the body which rests against the fixed board A or its equivalent; the moveable board B as well as the fixed board A abut against the side of the frame of the bed, only the abutments of B are in two parts, and provided with grooves, slides, and set screws, so that the moveable board may be pressed against the body of the traveller to hold it firm; straps may also be fixed to either of the two boards A or B for greater security. A head rest similar to that of the seat fitted with a soft cushion may be fixed to the sofa or bed. In order that the traveller may himself adjust the position of the moveable arms (either of the sofa, bed, or seat,) the moveable parts may carry a system of rods provided at one end with a crank and gearing within reach of the hand of the traveller, and at the other end with a pinion working in a rack fixed to the frame of the seat, sofa, or bed. By turning the crank the traveller may adjust at pleasure the position of the moveable piece; or suitable means may be provided for permitting the traveller to adjust separately the position of the two ends of this piece.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Michael Hodge Simpson in the Great Seal Patent Office on the 19th June 1867.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, MICHAEL HODGE SIMPSON, residing at No. 127, Milk Street, Boston, U.S. of America, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Nineteenth day of December, in the year of our Lord One thousand eight hundred and sixty-six, in the thirtieth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Michael Hodge Simpson, Her special licence that I, the said Michael Hodge Simpson, my executors, administrators, and assigns, or such others as I, the said Michael Hodge Simpson, my executors, administrators, and assigns

should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN APPARATUS FOR THE PREVENTION OF SEA SICKNESS," upon the condition (amongst others) that I, the said Michael Hodge Simpson, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Michael Hodge Simpson, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

Experience acquired during many sea voyages has convinced me that sea sickness is produced from the motion of the vessel causing the stomach to rub against the diaphragm and inferior organs.

The object of this Invention is to provide apparatus by means of which a traveller may prevent this rubbing action, and to effect this I employ apparatus so constructed that the traveller may connect his body as rigidly as possible with the ship.

For this purpose I construct a chair in the manner represented in the perspective view Figure 1 of the Drawings annexed; this chair is securely fixed to any part of the ship; it has two arms A, B, one of which A may be fixed, whilst the other B is capable of moving to or from the arm A; to allow of this the ends of the arm B are connected to slides sliding in grooves or guides formed from end to end of two wooden rails forming part of the chair, and to which the slides may be fixed by binding screws, as shown, or by other means. At the top of the back of the chair there is a rest C for the head, placed as represented in the Drawing, so as to support the head in a natural and easy manner. The traveller should sit down before the boat starts, and after having settled himself as comfortably as possible by placing the cushions so that the arms of the chair supported him by the armpits without hurting his shoulders or impeding his breathing, he should advance the moveable arm B towards the arm A, so that both arms shall press against his body and hold his body as rigidly as possible; the set screws are then turned so as to fix the arms A and B. In this position the traveller can support his head against the piece C, or lower it against his chest, his hands and feet being left free.

Simpson's Improvements in Apparatus for the Prevention of Sea Sickness.

Figures 2 and 3 represent two back views of the seat or chair; in these views the chair is resting on the front legs and on the ends of the two arms A and B. In this manner the traveller can vary his position when he is sufficiently accustomed to the motion of the ship to be able to change his position from that represented in Figure 1. In Figure 2 the traveller is shown to be lying on his stomach and chest, and to be fastened to the back of the chair with his feet resting flat on the ground, and since the chair is rigidly fixed the traveller is held as firmly as before.

In Figure 3 the traveller is shown to be seated on a board D (previously fastened to the bottom of the back of the chair) with his back against the back of the chair.

To enable the traveller to resist with more certainty the effect of large waves the arms A, B, are furnished with fixed handles for the traveller to hold when in the position shown in Figure 1, and other handles are attached to the back legs or other part of the seat for the traveller to hold when in the attitude represented in Figure 3. The traveller by holding these handles may retain himself in a rigid position during the passage of the wave.

I do not intend to limit myself to the forms of seat shown, as they are only given as examples. Thus the arms A and B in place of being straight may be curved to follow the shape of the body, or nearly so, the pressure against the body will then be softer and more even; or they may be stuffed and trimmed like the various other parts of the chair, and coverings may be applied as a protection from the cold, and waterproofs as a shelter from spray or wet, and an adjustable footboard to accommodate the feet. The method of adjusting and securing the moveable arm B may also be varied, and one end of it only need be moveable, the other end simply pivotted on a centre. Both arms may also be made moveable and so arranged that the height of the upper ends of the rods may be adapted to the height of the traveller. The head rest may also, independently of its vertical adjustment, run along a groove formed in the top rail of the back of the chair in order the better to adapt it to the position of the traveller.

In Figure 4 is represented a sofa combining several seats constructed according to my system. The space between the moveable arm of one seat and the fixed arm of the next is sufficient for the slides and set screws. The seats may be of varied sizes to suit different persons.

The principle which governs the construction of these seats may, as shown at Figure 5, be applied with some modification to sofas or beds. With sofas or beds, as now constructed, not only is it impossible for a traveller to hold himself rigid, but he is sometimes actually thrown out on to the floor of

the cabin. The side boards A and B in Figure 5 are to insure the immobility of the body which rests against the fixed board A, or its equivalent; the moveable board B, as well as the fixed board A, abut against the side of the frame of the bed, only the abutments of B are in two parts and provided with grooves, slides, and set screws, so that the moveable board may be pressed against the body of the traveller to hold it firm; straps may also be fixed to either of the two boards A or B for greater security. A head rest similar to that of the set fitted with a soft cushion may be fixed to the sofa or bed. In order that the traveller may himself adjust the position of the moveable arms (either of the sofa, bed, or seat) the moveable parts may carry a system of rods provided at one end with a crank and gearing within reach of the hand of the traveller, and at the other end with a pinion working in a rack fixed to the frame of the seat, sofa, or bed. By turning the crank the traveller may adjust at pleasure the position of the moveable piece; or suitable means may be provided for permitting the traveller to adjust separately the position of the two ends of this piece.

Having thus described my Invention, it should be understood that what I claim is the combination of apparatus for preventing sea sickness, substantially as above described, and whatever may be the mode of its application, so long as it realizes the principle above set forth and described.

In witness whereof, I, the said Michael Hodge Simpson, have hereunto set my hand and seal, this Fifteenth day of June, in the year of our Lord One thousand eight hundred and sixty-seven.

MICHAEL HODGE SIMPSON. (L.S.)

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1867.

(1 SHEET)

A.D. 1866, Dec. 19, N°. 3338,
SIMPSON'S Provisional Specification.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

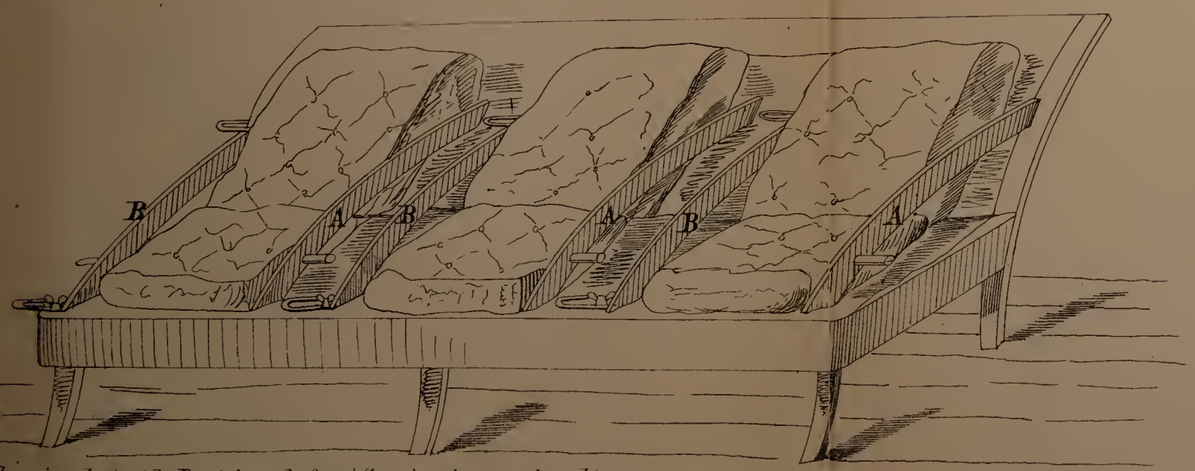
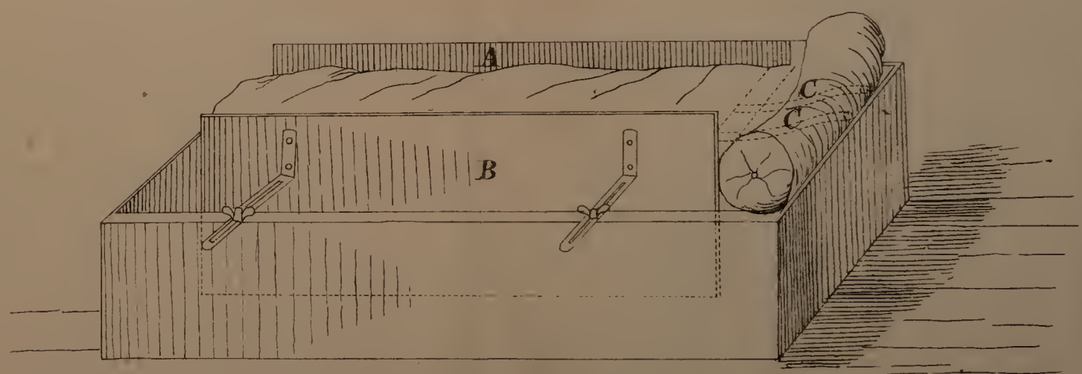


FIG. 5.



The drawing left with Provisional Specification is not colored.

Drawn on Stone by Malby & Sons.

London: Printed by George Edward Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty. 1867

(1 SHEET)

A.D. 1866, Dec. 19, N°. 3338,
SIMPSON'S Specification.

FIG. 1.

FIG. 2.

FIG. 3.

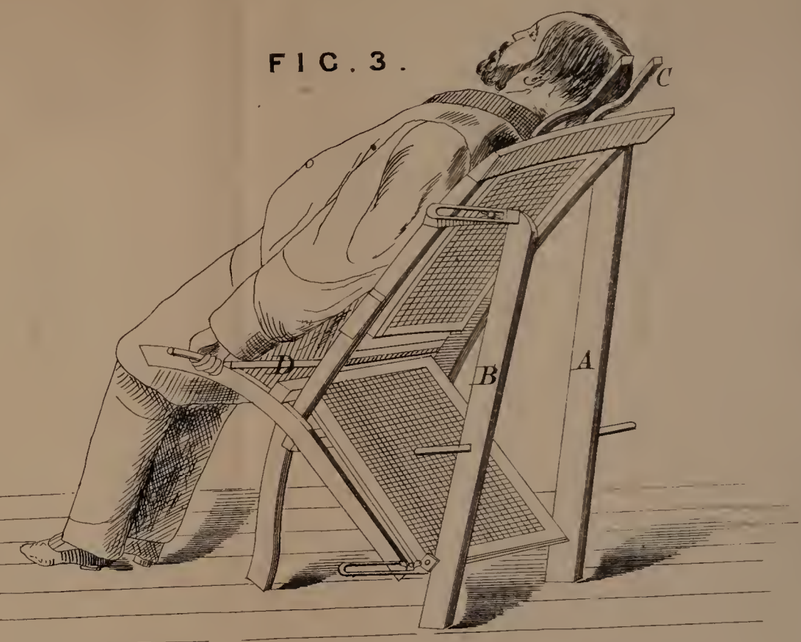


FIG. 4.

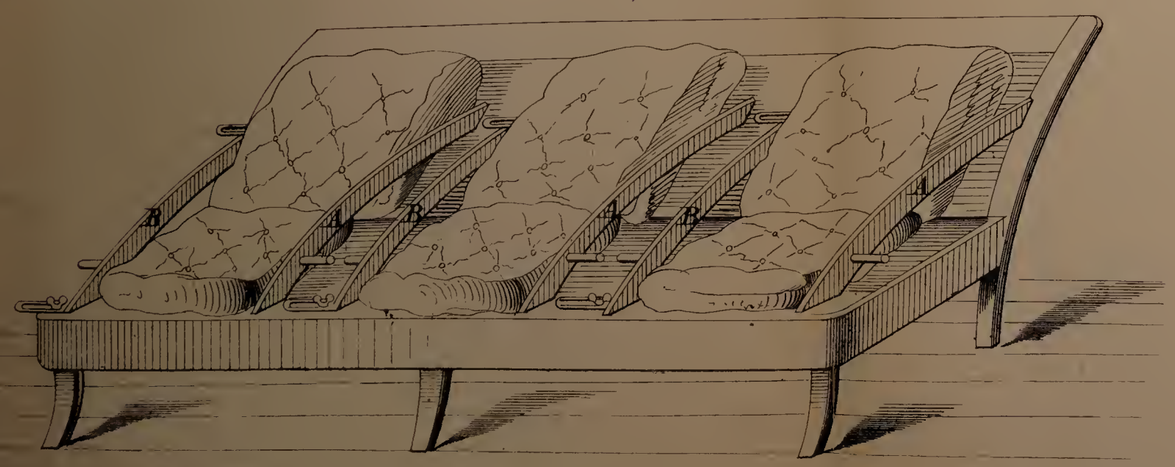
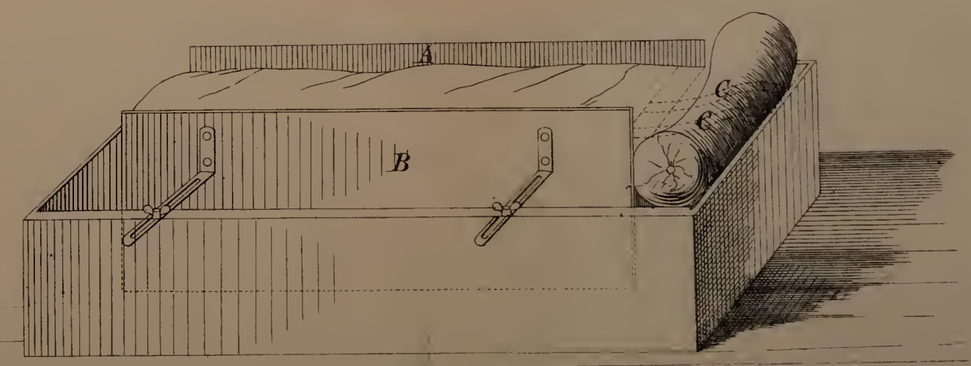


FIG. 5.



The filed drawing is not colored

Drawn on Stone by Malby & Sons.

London: Printed by George Edward Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty. 1867